

What is claimed is:

1. A method for providing accurate positioning signals in a TDMA positioning system to a position receiver configured with at least one correlator, said positioning receiver mitigating cross-correlation artifacts and exhibiting high signal-to-noise ratios, the method comprising:
  - a) transmitting said positioning signals in a known TDMA sequence;
  - b) chronologically synchronizing said position receiver to said known TDMA sequence of said positioning signals;
  - c) configuring said at least one correlator to sequentially track said positioning signals in synchronicity with said known TDMA sequence.
2. The method of Claim 1, wherein said configuring further includes said at least one pseudo-random number (PRN) code sequence generator replicating the pseudo-random number (PRN) code sequence of said positioning signals in synchronicity with said known TDMA sequence.
3. A method of sequentially receiving a plurality of TDMA positioning signals broadcast in a known TDMA sequence, the method comprising:
  - a) deploying a position receiver containing:
    - i) means to receive and interpret said TDMA positioning signals;
    - ii) at least one correlator communicatively coupled to said position receiver, each correlator configured with:
      - I. means for providing a master timing reference for said correlator;
      - II. means to analyse the relationship between the reception time of the TDMA positioning signals and said master timing reference, and subsequently determine the start and stop times of the correlator integration interval relative to said master timing reference;
      - III. means to sequentially generate the next PRN code of the known TDMA sequence responsive to said determined start and stop times;
  - b) receiving at least one TDMA positioning signal at said position receiver and determining said reception time of said TDMA signals;
  - c) communicating said determined reception time to said at least one correlator, thereby generating a PRN sequence in synchronicity with the reception of said TDMA positioning signals.